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# Scope with reference to convention Imo Model Course

This course is intended for fresh trainees who have not previously served on board a ship to prepare them for working as deck ratings. This training, together with the basic Safety Training (STCW Code A-VI/1.2) and Company arranged Training will cover the mandatory minimum training requirement prescribed in Regulation VI/1 and II/4-2.2.2 of International Convention of Standards of Training, Certification and Watch keeping for Seafarers (STCW), 95 Code. Main content of the course covers orientation and familiarization of ship in general and navigational bridge and deck, equipment therein in particular. This includes training on duties, functions, responsibilities and watch keeping in addition to Emergency, Safety and Survival.

## Objective

1. This Course will provide sufficient knowledge for a person intending to go to sea as a Deck Rating to operate and work on the shipboard machinery and systems typical of various types of merchant vessels in a safe and efficient manner.
2. On Successful completion of this Course, the participant should be able to:
  - a. Understand a deck rating's responsibilities as an efficient member of the operational team in Watch keeping and navigational bridge operations.
  - b. Describe safe working practices and procedures during mooring and anchoring operations.
  - c. Describe the operation and maintenance of deck equipment, rope and wirework.
  - d. Understand the safety requirements and precaution associated with various types of modern merchant vessels

## Entry Standard, Selection Criteria of Students

**Education:** Secondary School Certificate (SSC) with any Background

**Age limits:** 16-25 years

**Medical:** Eye sight 6/12, free of color blindness & According to STCW Convention.

## Course Intake Limitations

For practical exercises student/teacher ratio should not exceed 10:1

## Faculty Requirements

Minimum qualification of any instructor must be class 1 Deck Officer Certificate of Competency or equivalent with relevant sea experience.

## Facilities and Equipment

Normal classroom facilities with and overhead projector must be available. VCR, television and instructional videotapes are highly recommended. The demonstration room/laboratory will be required to contain the following items/models of items cross/sectioned for inspection or poster size drawings/photographs of the same so that the main components are visible:

- I. Navigational Bridge equipment.
- II. Modern derricks and cranes equipment
- III. Mooring and anchoring equipment
- IV. Various types of vessels photo.
- V. Tools, cargo slings and cargo handling equipment.
- VI. Copies of COSWP for Merchant seaman and labels for dangerous good.

## Major Texts and References

### Reference:

1. **Moore.** International light, Shape and Sound Signals
2. IMO, International Conference on Training and Certification of Seafarers Collision Regulation: Distress Signals
3. **HMSO;** Code of safe working Practices for Merchant Seaman
4. **Taylor , LG :** Cargo Work
5. Basic Spoken and Written English by **Mohammad Rasel Akon.**

## Summary Syllabus

Subject Area		Hours	
		Lectures	Practical
1.	<b>Ship and Shipping Familiarization</b>	6.00	
2.	<b>General Ship Knowledge</b>	23.75	0.75
3.	<b>General Safety and Accident Prevention</b>	19.50	
4.	<b>Cargo Work</b>	23.25	2.25
5.	<b>Bridge Operations and Watch keeping</b>	13.50	13.50
6.	<b>Rope and Wire Work</b>	5.25	21.75
7.	<b>Deck Operations</b>	18.00	
8.	<b>Port Duties</b>	15.00	
9.	<b>Ship Maintenance and Paint Systems</b>	15.00	
10.	<b>Communication</b>	7.50	1.50
11.	<b>Engine Familiarization</b>	21.00	6.00
12.	<b>Visits</b>		13.5
13.	<b>English</b>	34.50	
14.	<b>Assessment</b>	6.75	2.25
Sub Totals		209.00	61.50
<b>Total</b>		<b>270.50</b>	

## Course Outline Shore base & On board Training:

Subject Area			Hours	
			Lectures	Practical
<b>1.</b>	<b>Ship and Shipping Familiarization</b>			
	1.1	Introduction	0.75	
	1.2	Ship, shipboard organization, structure and process	1.50	
	1.3	Department of Shipping, Government of Bangladesh	1.50	
	1.4	Seafarers and ship owner organization	0.75	
	1.5	Seafarer and the Law	1.50	
			6.00	
<b>2.</b>	<b>General Ship Knowledge</b>			
	2.1	Common Nautical Terms	2.25	
	2.2	Types of ships and layout	2.25	0.75
	2.3	Operational mode of various types of ships	5.25	
	2.4	Gears for various type of ships	3.75	
	2.5	Principal features of a ship	3.75	
	2.6	Principal parameters of ship stability	4.50	
	2.7	List of all Deck Machinery	1.50	
			23.25	0.75
<b>3.</b>	<b>General Safety and Accident Prevention</b>			
	3.1	Introduction	3.75	
	3.2	COSWP for merchant seamen	3.00	
	3.3	Work activities	3.75	
	3.4	Working tools	4.50	
	3.5	Lifting plant	4.50	
			19.50	
<b>4.</b>	<b>Cargo Work</b>			
	4.1	Cargo Handling equipment	2.25	2.25
	4.2	General cargo	4.50	
	4.3	Liquid Bulk cargo	4.50	
	4.4	Containerized cargo	3.75	
	4.5	Roll-on/Roll-off cargo	3.00	
	4.6	Solid Bulk cargo	3.00	
	4.7	Dangerous goods	2.25	
			23.25	2.25
<b>5.</b>	<b>Bridge Operations and Watch keeping</b>			
	5.1	Look out and watch keeping	3.00	
	5.2	Lights and shapes	3.00	
	5.3	Distress signals	3.00	
	5.4	Bridge equipment	2.25	
	5.5	Compass	2.25	
	5.6	Steering		13.50
			13.50	13.50
<b>6.</b>	<b>Rope and Wire Work</b>			
	6.1	Types of ropes and wires used on board	0.75	2.25
	6.2	Properties and use of various ropes and wires	1.50	7.50
	6.3	Storage and maintenance of ropes and wires	1.50	2.50
	6.4	Proper use of gantlines and safety harnesses	0.75	4.50
	6.5	Safe rigging practice	0.75	5.25
			5.25	21.75

<b>7.</b>	<b>Deck Operations</b>			
	7.1	Mooring and anchoring operation	6.00	
	7.2	Pilot ladders and means of access	4.50	
	7.3	Hatches and hatch covers	4.50	
	7.4	Bow and stern doors and ramps	3.00	
			18.00	
<b>8.</b>	<b>Port Duties</b>			
	8.1	Arrival port duties	3.00	
	8.2	Departure port duties	3.75	
	8.3	Watch keeping in port	3.75	
	8.4	Heavy weather preparation	4.50	
			15.00	
<b>9.</b>	<b>Ship Maintenance and Paint Systems</b>			
	9.1	Corrosion in the Marine Environment	3.00	
	9.2	Surface Preparation Equipment and Techniques	3.00	
	9.3	Shipboard derricks and cranes	4.50	
	9.4	Dry-docking	4.50	
			15.00	
<b>10.</b>	<b>Communication</b>			
	10.1	Radio communication	1.50	0.75
	10.2	Shipboard Communication	3.75	
	10.3	Ship to Shore communication	2.25	0.75
			7.50	1.50
<b>11.</b>	<b>Engine Familiarization</b>			
	11.1	Machinery space layout	1.50	
	11.2	Items in the machinery space	4.50	4.50
	11.3	Tanks	3.00	
	11.4	Propulsion system	2.25	
	11.5	Piping systems	3.00	
	11.6	Power generation	0.75	0.75
	11.7	Steering gear	1.50	0.75
	11.8	UMS (unmanned machinery space) operation	1.50	
	11.9	General safety in machinery space	3.00	
			21.00	6.00
<b>12.</b>	<b>Visits</b>			
	12.1	Ship		4.50
	12.2	Dry-dock		4.50
	12.3	Marine Workshop		4.50
				13.5
<b>13.</b>	<b>English</b>			
	13.1	Spoken English	27.0	
	13.2	Marine Vocabulary	7.50	
			34.5	
<b>14.</b>	<b>Assessment</b>			
	14.1	Item 1 to 10	5.25	
	14.2	Item 11	0.75	
	14.3	Item 13	0.75	2.25
			6.75	2.25
<b>Sub Totals</b>			<b>209.00</b>	<b>61.50</b>
<b>Total</b>			<b>270.50</b>	

## Detailed Teaching Syllabus

<b>Learning Object</b>		
		Hours
<b>1</b>	<b>Ship and Shipping Familiarization</b>	<b>6.0</b>
<b>1.1</b>	<b>Introduction</b>	<b>0.75</b>
	<ol style="list-style-type: none"> <li>1. Understands the outline of Bangladesh Merchant Services</li> <li>2. List cargoes and trade patterns</li> </ol>	
<b>1.2</b>	<b>Ship, shipboard organization, structure and process</b>	<b>1.5</b>
	<ol style="list-style-type: none"> <li>1. Describes shipboard organizational set up</li> <li>2. Understands rules that governs ships administration</li> <li>3. Knows duties and responsibility of different ranks.</li> </ol>	
<b>1.3</b>	<b>Department of Shipping, Government of Bangladesh</b>	<b>1.5</b>
	<ol style="list-style-type: none"> <li>1. Understands the importance of Mercantile Marine Office</li> <li>2. Knows the significance of Ship's Article</li> <li>3. States procedure for joining and leaving ship</li> </ol>	
<b>1.4</b>	<b>Seafarer and ship owner organizations</b>	<b>0.75</b>
	Understand the relevance of <ol style="list-style-type: none"> <li>1. Ship owners</li> <li>2. Unions</li> <li>3. Crewing agents</li> </ol>	
<b>1.5</b>	<b>Seafarer and the Law</b>	<b>1.5</b>
	Has the basic concept of <ol style="list-style-type: none"> <li>1. IMO and ILO Conventions</li> <li>2. Bangladesh Merchant Shipping Recruitment, Training and Certification Rules</li> <li>3. Bangladesh rules relating to safety seafarers</li> </ol>	
<b>2</b>	<b>General Ship Knowledge</b>	<b>24.0</b>
<b>2.1</b>	<b>Common nautical terms</b>	<b>2.25</b>
	<ol style="list-style-type: none"> <li>1. Writes the definitions of common nautical terms e.g. dock, bridge, hold, hatch, tank, peaks, DB tanks, Ballast tanks, air pipes, bilge, anchors, windlass, winch, derrick etc.</li> <li>2. Knows the application and relevance of these terms to ship</li> </ol>	
<b>2.2</b>	<b>Types of ships and layout</b>	<b>3.0</b>
	<ol style="list-style-type: none"> <li>1. Lists main classification of ships as passenger and cargo ships</li> <li>2. Describes the purpose and main features of passenger ships</li> <li>3. Lists the different types of cargo ships</li> <li>4. Describes the different trades of cargo ships</li> </ol>	

<b>2.3</b>	<b>Operational mode of various types of ships</b>	<b>5.25</b>
	Understands the operational mode of <ul style="list-style-type: none"> <li>1. Tankers</li> <li>2. Solid bulk carriers</li> <li>3. Roll-on / Roll-off ships</li> </ul>	
	<ul style="list-style-type: none"> <li>4. Container ships</li> <li>5. General cargo ships</li> </ul>	
<b>2.4</b>	<b>Gears for various types of ship</b>	<b>3.75</b>
	Understands the use of <ul style="list-style-type: none"> <li>1. Pumps and piping systems</li> <li>2. Conveyor belt, extractors bucket.</li> <li>3. Horizontal movement, trucks, forklift and trailers</li> <li>4. Derrick and cranes</li> </ul>	
<b>2.5</b>	<b>Principal Features of a ship</b>	<b>3.75</b>
	Knows the <ul style="list-style-type: none"> <li>1. Terms and definition related to ship's form</li> <li>2. Names and functions of part of ship</li> <li>3. Various section for specialized trade and carriage of cargo</li> </ul>	
<b>2.6</b>	<b>Principal parameters of ship stability</b>	<b>4.5</b>
	<ul style="list-style-type: none"> <li>1. Understands capacity, tonnage, dead weight, draught marks, sounding etc.</li> <li>2. Understands capacity plan and location on board</li> </ul>	
<b>2.7</b>	<b>List of deck machinery</b>	<b>1.5</b>
	<ul style="list-style-type: none"> <li>1. Identifies all deck machinery</li> <li>2. States the name and functions of various parts of deck machinery</li> </ul>	
<b>3</b>	<b>General Safety and Accident Prevention</b>	<b>19.5</b>
<b>3.1</b>	<b>Introduction</b>	<b>3.75</b>
	<ul style="list-style-type: none"> <li>1. List different shipboard hazards</li> <li>2. Understands the dangers associated with enclosed spaces</li> <li>3. States the general safety onboard ships</li> <li>4. Explains the importance of safety organization onboard</li> </ul>	
<b>3.2</b>	<b>COSWP for merchant seamen</b>	<b>3.0</b>
	<ul style="list-style-type: none"> <li>1. Understands the principles of COSWP (Code of Safe Working Practice) for merchant seamen</li> <li>2. Knows proper application of COSWP for merchant seamen</li> <li>3. Understands the use of safety signs and labels</li> </ul>	
<b>3.3</b>	<b>Work Activities</b>	<b>3.75</b>
	<ul style="list-style-type: none"> <li>1. Lists the dangers associated with working aloft and outboard</li> <li>2. States the safe use of portable ladders</li> <li>3. Describes the general safety associated with the use of cradles, stages and bosun's chair</li> </ul>	

	<ol style="list-style-type: none"> <li>4. Explains the hazards associated with manual lifting and carrying</li> <li>5. States safe procedures for manual lifting and carrying</li> </ol>	
<b>3.4</b>	<b>Working tools</b>	<b>4.5</b>
	<p>Knows the hazards associated with and the safe use of</p> <ol style="list-style-type: none"> <li>1. Portable power operated tools and equipment</li> <li>2. Workshop and bench machines</li> <li>3. Abrasive wheels</li> <li>4. Hydraulic/pneumatic/high pressure jetting equipment</li> <li>5. Electrical appliances including radio equipment</li> </ol>	
<b>3.5</b>	<b>Lifting plant</b>	<b>4.5</b>
	<ol style="list-style-type: none"> <li>1. States the general safety requirements for lifting appliances</li> <li>2. Describes the safe use of winches and cranes</li> <li>3. Understands the safety associated with the use of derricks</li> <li>4. States how to test lifting equipment and report defect to a competent person</li> <li>5. Recognizes the code of hand signals</li> </ol>	
<b>4</b>	<b>Cargo Work</b>	<b>25.5</b>
<b>4.1</b>	<b>Cargo handling equipment</b>	<b>4.5</b>
	<ol style="list-style-type: none"> <li>1. Identifies different types of cargo gears</li> <li>2. Lists accessories of cargo gears</li> <li>3. Knows how to rig lifting equipment and pipelines</li> <li>4. Describes operation and control of gears</li> </ol>	
<b>4.2</b>	<b>General cargo</b>	<b>4.5</b>
	<ol style="list-style-type: none"> <li>1. Lists types of cargo carried, packaging and identifies associated hazards</li> <li>2. Describes preparation and precautions prior to loading</li> <li>3. States the safety precaution for heavy lifts and deck cargoes</li> </ol>	
<b>4.3</b>	<b>Liquid bulk cargo</b>	<b>4.5</b>
	<ol style="list-style-type: none"> <li>1. States the types of liquid bulk cargo carried including gas and chemicals</li> <li>2. Explains general fire safety and pollution precaution for liquid bulk cargoes</li> <li>3. Describes piping systems, pump room and tank washing arrangements for liquid bulk cargo ships</li> </ol>	
<b>4.4</b>	<b>Containerized cargo</b>	<b>3.75</b>
	<ol style="list-style-type: none"> <li>1. Lists different types of containerized cargo and states associated hazards</li> <li>2. Describes different types of containers</li> <li>3. Explains correct securing arrangements for containers</li> </ol>	
<b>4.5</b>	<b>Roll-on/Roll off cargo</b>	<b>3.0</b>
	<ol style="list-style-type: none"> <li>1. States the purpose of Ro-Ro ships</li> <li>2. Identifies hazards associated with Ro-Ro Ships including flooding inadequate ventilation and fire</li> <li>3. Knows the use of truck fork lift and trailer movement</li> </ol>	
<b>4.6</b>	<b>Solid bulk cargo</b>	<b>3.0</b>



	<ol style="list-style-type: none"> <li>1. Lists different types of solid bulk cargoes and states associated hazards</li> <li>2. States code of safe practice for solid bulk cargoes</li> <li>3. Describes self-discharging systems</li> </ol>	
<b>4.7</b>	<b>Dangerous goods</b>	<b>2.25</b>
	<ol style="list-style-type: none"> <li>1. Understands the basic principles of IMDG code and associated manuals</li> <li>2. States the classification of dangerous goods</li> <li>3. Recognizes the dangerous goods labels</li> </ol>	
<b>5</b>	<b>Bridge Operation and Watch keeping</b>	<b>27.0</b>
<b>5.1</b>	<b>Lookout and watch keeping</b>	<b>3.0</b>
	<ol style="list-style-type: none"> <li>1. Describes the duties of an A.B. as efficient member of the operational team</li> <li>2. Knows appropriate responses as A.B. in various situations</li> </ol>	
<b>5.2</b>	<b>Lights and shapes</b>	<b>3.0</b>
	<ol style="list-style-type: none"> <li>1. Recognizes different lights and shapes for navigational purpose</li> <li>2. Interprets meanings of various lights and shapes</li> <li>3. Understands the importance of exhibit lights and shapes</li> </ol>	
<b>5.3</b>	<b>Distress Signals</b>	<b>3.0</b>
	<ol style="list-style-type: none"> <li>1. Identifies distress signals</li> <li>2. States response to distress signals</li> <li>3. Understands the need to assistance</li> </ol>	
<b>5.4</b>	<b>Bridge equipment</b>	<b>2.25</b>
	<ol style="list-style-type: none"> <li>1. Identifies all bridge equipment</li> <li>2. States function and use of all bridge equipment</li> </ol>	
<b>5.5</b>	<b>Compass</b>	<b>2.25</b>
	<ol style="list-style-type: none"> <li>1. Describes how to take and report compass and relative bearings</li> <li>2. States how to change-over from automatic pilot to hand and vice versa</li> </ol>	
<b>5.6</b>	<b>Steering</b>	<b>13.5</b>
	<ol style="list-style-type: none"> <li>1. Understands the meanings of helm orders</li> <li>2. Knows how to respond to helm orders</li> <li>3. Able to steer a vessel on the simulator</li> </ol>	
<b>6</b>	<b>Rope and Wire Work</b>	<b>27.0</b>
<b>Ref:</b>		
<b>6.1</b>	<b>Types of ropes and wires used on board</b>	<b>3.0</b>
	<ol style="list-style-type: none"> <li>1. Identifies various types of ropes and wires</li> <li>2. Recognizes wire, natural ropes and synthetic ropes</li> </ol>	
<b>6.2</b>	<b>Properties and use of various ropes and wires</b>	<b>9.0</b>
	<ol style="list-style-type: none"> <li>1. States the properties and use of natural fiber, synthetic fiber and wire ropes</li> <li>2. Understands the construction, safe working load, markings and measurement on ropes and wires</li> <li>3. States and demonstrates the use of common knots, hitches, whippings</li> </ol>	

	and splicing	
<b>6.3</b>	<b>Storage and maintenance of ropes and wires</b>	<b>3.75</b>
	<ol style="list-style-type: none"> <li>1. Describes proper storage procedures for ropes and wires</li> <li>2. Demonstrates method of uncoiling, flaking and kinking out new coils of rope/wire</li> <li>3. States proper method of rope maintenance and wire lubrication</li> </ol>	
<b>6.4</b>	<b>Gantlines and safety harnesses</b>	<b>5.25</b>
	<ol style="list-style-type: none"> <li>1. Demonstrates the proper use of gantlines, lizards and safety harnesses</li> <li>2. States the precautions when working aloof and over side.</li> <li>3. Demonstrates the use and inspection of slings and strops, snooters and legs</li> </ol>	
<b>6.5</b>	<b>Safe rigging practice</b>	<b>6.0</b>
	<p>Demonstrates ability to</p> <ol style="list-style-type: none"> <li>1. Rig stages and bosun's chair</li> <li>2. Sling machinery parts, use of tackles, purchases and chain blocks</li> </ol>	
<b>7</b>	<b>Deck Operation</b>	<b>18.0</b>
<b>7.1</b>	<b>Mooring and anchor operation</b>	<b>6.0</b>
	<ol style="list-style-type: none"> <li>1. Explains the safe use to windlass and winches</li> <li>2. Describes the general mooring arrangement including use of stoppers and making fast to bitts</li> <li>3. States anchoring terms, common types and operations</li> <li>4. Describes preparation, letting go, weighing in anchor and accident prevention</li> </ol>	
<b>7.2</b>	<b>Pilot ladders and means of access</b>	<b>4.5</b>
	<p>Has knowledge of</p> <ol style="list-style-type: none"> <li>1. Inspection, rigging and maintenance of pilot ladders and pilot hoists</li> <li>2. Inspection, rigging and maintenance of gangways, accommodation ladders</li> <li>3. Safety nets, side rails, stanchions, securing and portable ladders</li> </ol>	
<b>7.3</b>	<b>Hatches and hatch covers</b>	<b>4.5</b>
	<ol style="list-style-type: none"> <li>1. Lists types of hatches and hatch covers</li> <li>2. Understands method of securing and associated problems</li> <li>3. Describes proper maintenance and checks</li> </ol>	
<b>7.4</b>	<b>Bow and stern doors, and ramps</b>	<b>3.0</b>
	<ol style="list-style-type: none"> <li>1. States types and uses of bow and stern doors and ramps</li> <li>2. Describes correct method of opening, closing and securing</li> <li>3. Explains checks on water tightness by the use of indicators and surveillance camera</li> </ol>	
<b>8</b>	<b>Port Duties</b>	<b>15.0</b>

<b>8.1</b>	<b>Arrival port duties</b>	<b>3.0</b>
	<ol style="list-style-type: none"> <li>1. Describes the safety preparation prior to arrival</li> <li>2. Understands the importance to safety precaution and care required for different cargo types on arrival port including liquid cargo</li> </ol>	
<b>8.2</b>	<b>Departure port duties</b>	<b>3.75</b>
	<ol style="list-style-type: none"> <li>1. Describes the safety preparation prior to departure</li> <li>2. Describes proper securing arrangements of cargo and ship equipment</li> </ol>	
<b>8.3</b>	<b>Watch keeping in port</b>	<b>3.75</b>
	<p>Understands the duties with regards to</p> <ol style="list-style-type: none"> <li>1. Safety of crew, cargo and ship e.g. fire patrol etc.</li> <li>2. Gangway and mooring e.g. safety nets, unauthorized personal etc.</li> </ol>	
<b>8.4</b>	<b>Heavy weather preparation</b>	<b>4.5</b>
	<ol style="list-style-type: none"> <li>1. Describes personal safety precautions in heavy weather e.g. rigging lifeline on deck etc.</li> <li>2. Explains the extra securing arrangements of ship's equipment and gear</li> </ol>	
<b>9</b>	<b>Ship Maintenance and Paint Systems</b>	<b>15.0</b>
<b>9.1</b>	<b>Corrosion in the marine environment</b>	<b>3.0</b>
	<ol style="list-style-type: none"> <li>1. Explains the causes of corrosion as moisture, weathering, electro-chemical etc.</li> <li>2. Lists the types of corrosion and common location on board ships</li> <li>3. States the importance of painting to prevent corrosion</li> </ol>	
<b>9.2</b>	<b>Surface preparation equipment and techniques</b>	<b>3.0</b>
	<ol style="list-style-type: none"> <li>1. Describes different methods of surface preparation</li> <li>2. Identifies different equipment used in surface preparation</li> <li>3. Explains different techniques of surface preparation</li> </ol>	
<b>9.3</b>	<b>Shipboard derricks and cranes</b>	<b>4.5</b>
	<ol style="list-style-type: none"> <li>1. States the importance of good maintenance of derricks and cranes</li> <li>2. Describes method of maintenance and checks of cargo handling equipment</li> <li>3. Explain how derricks and cranes are tested</li> <li>4. Understand the basic principles of planned maintenance of deck and cargo gears</li> </ol>	
<b>9.4</b>	<b>Dry-docking</b>	<b>4.5</b>
	<ol style="list-style-type: none"> <li>1. Understands the purpose of dry-docking a vessel</li> <li>2. Lists general items inspected and repaired in dry docks</li> <li>3. Describes safety precautions to be observed in dry docks</li> </ol>	
<b>10</b>	<b>Communication</b>	<b>9.0</b>
<b>10.1</b>	<b>Radio Communication</b>	<b>2.25</b>
	<p>Understands the purpose and use of</p> <ol style="list-style-type: none"> <li>1. Radiotelegraphs</li> </ol>	

	<ol style="list-style-type: none"> <li>2. Radiotelephones</li> <li>3. EPIRB and SART</li> </ol>	
<b>10.2</b>	<b>Shipboard communication</b>	<b>3.75</b>
	<ol style="list-style-type: none"> <li>1. Lists all shipboard communication equipment and states their use</li> <li>2. Recognizes all different alarms onboard ships</li> <li>3. Understands the importance of proper communication inside and outside ship</li> </ol>	
<b>10.3</b>	<b>Ship to shore communication</b>	<b>3.0</b>
	<ol style="list-style-type: none"> <li>1. Understands distress, urgency and safety messages</li> <li>2. Describes the use of survival craft radio transceiver</li> </ol>	
<b>11</b>	<b>Engine familiarization</b>	<b>27.0</b>
<b>11.1</b>	<b>Machinery space layout</b>	<b>1.5</b>
	<ol style="list-style-type: none"> <li>1. Understands the purpose of machinery space</li> <li>2. Describes the location and lay-out of machinery spaces</li> <li>3. States that there are escape routes from machinery space</li> <li>4. Defines bulkhead, platform, tank-top, cofferdam, bilge, duct keel, shaft tunnel, ventilators, flaps, drains and watertight door</li> </ol>	
<b>11.2</b>	<b>Items in the machinery space</b>	<b>9.0</b>
	<p>Identifies and states the purpose of</p> <ol style="list-style-type: none"> <li>1. Engines</li> <li>2. Pumps</li> <li>3. Compressors</li> <li>4. Boilers and incinerator</li> </ol>	
	<ol style="list-style-type: none"> <li>5. Purifiers</li> <li>6. Pressure vessels</li> <li>7. Heat exchangers</li> <li>8. Fresh water generators</li> <li>9. Pollution Prevention equipment</li> <li>10. Miscellaneous</li> </ol>	
<b>11.3</b>	<b>Tanks</b>	<b>3.0</b>
	<ol style="list-style-type: none"> <li>1. Understands the functions of tanks</li> <li>2. Lists the types and names of different tanks common to any ship</li> <li>3. States the common features of tank</li> <li>4. Describes the procedure to take sounding of a tank</li> </ol>	
<b>11.4</b>	<b>Propulsion system</b>	<b>2.25</b>
	<ol style="list-style-type: none"> <li>1. Understands propulsion arrangements for ships</li> <li>2. States that the main propulsion engine may be a slow speed diesel engine, a medium speed diesel engine or a steam engine</li> <li>3. Describes the shafting arrangement from main engine to propeller</li> <li>4. States the function of stern tube</li> <li>5. Describes the function of a prop</li> </ol>	
<b>11.5</b>	<b>Piping systems</b>	<b>3.0</b>

	<ol style="list-style-type: none"> <li>1. States the functions of cocks and valves</li> <li>2. Identifies different types of valves</li> <li>3. Explains why all valves should be correctly operated and maintained in good order</li> <li>4. Knows that joining /gaskets/rubber rings are essential for flange connections</li> <li>5. States the functions, types and applications of filters and strainers</li> <li>6. Lists the piping systems of engine room</li> <li>7. Identifies the colour coding of the different piping systems</li> </ol>	
<b>11.6</b>	<b>Power generation</b>	<b>1.5</b>
	<ol style="list-style-type: none"> <li>1. Understands basic difference between A.C. and D.C. systems</li> <li>2. Identifies diesel-generators, turbo-generators and shaft generators.</li> <li>3. Demonstrates how to parallel two generators and distribute loads evenly</li> <li>4. Describes emergency power supply arrangements on board ships.</li> </ol>	
<b>11.7</b>	<b>Steering gear</b>	<b>2.25</b>
	<ol style="list-style-type: none"> <li>1. States the function of a steering gear</li> <li>2. Understands a simple sketch showing working of a steering gear system</li> <li>3. Explains the purpose and procedure of emergency steering</li> <li>4. States the checks and tests carried out on steering gear prior departure and arrival port and also at sea</li> </ol>	
<b>11.8</b>	<b>UMS (unmanned machinery space) operation</b>	<b>1.5</b>
	<ol style="list-style-type: none"> <li>1. Understands the difference between manned and unmanned watch keeping</li> <li>2. States the requirements for unattended machinery space</li> <li>3. Aware of the safety measures for entering machinery space during unattended period.</li> </ol>	
<b>11.9</b>	<b>General safety in machinery space</b>	<b>3.0</b>
	<ol style="list-style-type: none"> <li>1. States the risk involved and precautions to be taken in isolating part of a liquid pressure system e.g. hot oil, seawater, hydraulic medium etc.</li> <li>2. States the risks involved and precautions to be taken in isolating part of a gas pressure system e.g. steam, compressed air, refrigerant etc.</li> <li>3. Describes proper procedure for electrical isolation of components /systems</li> <li>4. Identifies the hazards of engine room.</li> <li>5. States the importance of personal safety gears for working in the E/R</li> </ol>	
<b>12</b>	<b>Visits</b>	<b>13.5</b>
<b>12.1</b>	<b>Ship</b>	<b>4.5</b>
	<ol style="list-style-type: none"> <li>1. Guided tour of ships available in Chittagong port</li> </ol>	
<b>12.2</b>	<b>Dry-dock</b>	<b>4.5</b>
	<ol style="list-style-type: none"> <li>1. Supervised visit to the Chittagong dry-dock</li> </ol>	
<b>12.3</b>	<b>Workshop</b>	<b>4.5</b>

	1. Guided tour of BSC Marine Workshop or other suitable marine workshops	
<b>13</b>	<b>English</b>	<b>34.5</b>
<b>13.1</b>	<b>Spoken English</b>	<b>27.0</b>
	<ol style="list-style-type: none"> <li>1. Knows how to greet, show etiquette, order, request, question and use verbs</li> <li>2. Uses pronouns, prepositions, correlatives, active and passive voices, temporal, emphasis, countable, nouns and idiomatic sentences correctly</li> <li>3. Makes sentences of invitation, meeting, parting, gratitude, congratulations, good wishes, refusal, relating to meals, permission, encouragement, consolation, affection, negation, consent, apologies and annoyance</li> <li>4. Understands the common terms regarding health, doctors, hospitals, animals, games, post office, restaurants, shopping, transport, law, drugs and contraband items, police, immigration and all day to day affairs</li> <li>5. Knows correct spelling, pronunciation, abbreviations and phrases</li> <li>6. Understands common words and terms used onboard by multinational crew</li> </ol>	
<b>13.2</b>	<b>Marine Vocabulary</b>	<b>7.5</b>
	<ol style="list-style-type: none"> <li>1. Understands words and expressions relating to shipboard procedures, responses, urgent messages, position, courses, bearings, distances, speed, numbers, geographical names and time.</li> <li>2. Knows the terms associated with dangers to Navigation, warnings and assistance</li> <li>3. Discusses events relating to anchoring, arrival, berthing, departure, maneuvering, pilotage, fairway navigation, canal and lock operations and routing</li> <li>4. Knows common shipping terminology associated with course, radar, tide, storms, ports, weather, fishing, helicopters, ice-breakers etc.</li> <li>5. Knows how to communicate between ship-to-ship, ship-to-store and within ship by wireless to VHF sets.</li> </ol>	
<b>14.</b>	<b>Assessment</b>	<b>9.0</b>
<b>14.1</b>	<b>Item 1 to 10</b>	<b>5.25</b>
	1. Written quizzes, tests and examinations on continuous basis and orals	
<b>14.2</b>	<b>Item 11</b>	<b>0.75</b>
	1. Written assessment	
<b>14.3</b>	<b>Item 13</b>	<b>3.0</b>
	1. Written assessment and orals	

## **Assessment Method**

Short answer, multiple choices, fill in the blanks, hot spot, true/false and sketch labeling type questions in a written test are used for assessment. Practical assessment includes direct observation, oral questioning, role-play and demonstration of ability under realistic situation.

## **Maintenance of records in Data-base for facilitation of checking including assessments**

WMI will maintain a data-base of all the students who have completed the course. The following records for each individual will be kept so as to ensure that the certificate is issued to a candidate who has met the requirements as laid down by the governing authority regarding issuance of a certificate.

- Application form
- Assessment papers after completion of course
- Attendance Sheet
- Attested Xerox copy of the issued certificates.
- A registered data-base in hard copy and soft form.

## **Internal Quality Standard System**

The institute maintains quality standard system ISO 9001:2008, Certified by RINA

## **Course Conduct Procedure**

Course will be complied as per DOS Instruction and WMI operation guideline.

**Formats of certificate to be issued with correct reference to STCW and reference to approval and authorization by the Department of Shipping and contact point of the issuing institution for verifying authenticity**

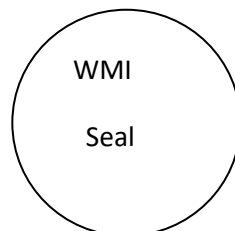
## **Pre-sea Deck Ratings Subjects**

<b>Subject Name</b>	<b>Ref. Clause</b>	<b>Hours</b>
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<b>General Ship Knowledge(GSK)</b>	1,2,11	57
<b>Cargo Work</b>	4, 8	40.5
<b>Seamanship</b>	6	27.25
<b>Watch keeping</b>	5, 10	36
<b>Ship Maintenance &amp; Safety (SMS)</b>	3, 7, 9	52.5
<b>Language(English )</b>	13	34.5
<b>Ship Visit &amp; Assessment</b>	12,14	22.5
<b>Total</b>		<b>270.50</b>

## DECK RATINGS CLASS ROUTINE

<b>Time/Day</b>	<b>Sunday</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>
<b>0930-1015</b>	<b>Seamanship</b>	<b>Seamanship</b>	<b>Watch keeping</b>	<b>SMS</b>	<b>SMS</b>
<b>1015-1100</b>	<b>Seamanship</b>	<b>Seamanship</b>	<b>Watch keeping</b>	<b>SMS</b>	<b>SMS</b>
<b>1100-1130</b>	<b>Tea Break</b>				
<b>1130-1215</b>	<b>G.S.K.</b>	<b>G.S.K.</b>	<b>Cargo Work</b>	<b>Cargo Work</b>	<b>G.S.K.</b>
<b>1215-1300</b>	<b>G.S.K.</b>	<b>G.S.K.</b>	<b>Cargo Work</b>	<b>Cargo Work</b>	<b>G.S.K.</b>
<b>Lunch Break</b>					
<b>1415-1530</b>	<b>English</b>	<b>English</b>	<b>English</b>	<b>Computer</b>	<b>English</b>



**Commandant**



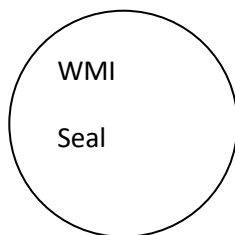
# Attendance of Instructor

## Instructor Class Record

**Course Name** : Pre Sea Deck Ratings

**Date** : DD/MM/YYYY to DD/MM/YYYY

Time/Day	Sunday	Monday	Tuesday	Wednesday	Thursday
<b>0930-1015</b>	Sub. Name				
	Signature				
<b>1015-1100</b>	Sub. Name				
	Signature				
<b>1100-1130</b>	<b>Tea Break</b>				
<b>1130-1215</b>	Sub. Name				
	Signature				
<b>1215-1300</b>	Sub. Name				
	Signature				
<b>Lunch Break</b>					
<b>1415-1530</b>	Sub Name				
	Signature				



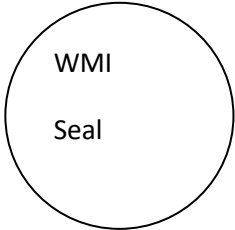
**Commandant**

**Attendance of Students**  
**WORLD MARITIME INSTITUTE**  
**Ratings Class Attendance Record**

**Name of the Course** : Pre Sea Deck Ratings

**Date** : DD/MM/YYYY to DD/MM/YYYY

A/N	Name	Date												



**Commandant**